

Claim 1

1. A method comprising:

receiving, from a delegator, a designation of a role and a delegate to assume the role;

receiving, from a credential service provider, an

5 indication that the designation is valid; and

issuing a delegation credential in response to receiving the indication.

2. The method of claim 1, wherein the delegation credential comprises encoded delegation information.

3. The method of claim 1, wherein the delegation credential allows the delegate to assume the role.

4. The method of claim 1, further comprising:

issuing a confirmation to the delegator which indicates that the delegation credential was issued.

5. The method of claim 1, wherein the delegator can delegate multiple functions, the role comprising one of the multiple functions.

10
15
20
25
30
35
40
45
50
55
60
65
70
75

6. The method of claim 1, wherein the delegation credential is issued to and stored by at least one of the delegate and a credential service provider.

5 7. The method of claim 6, wherein the credential service provider receives a digital credential from the delegate and an access requirement from a relying party and determines if the digital credential is valid for the access requirement.

10 8. The method of claim 7, wherein the credential service provider determines if there is a delegation credential that corresponds to the access requirement and provides the delegation credential that corresponds to the access requirement to the delegate.

15 9. The method of claim 8, wherein multiple delegation credentials correspond to the access requirement and the credential service provider provides the multiple delegation credentials to the delegate.

20

10. The method of claim 9, wherein the delegate selects which of the multiple delegation credentials to use for the access requirement and the credential service provider

provides a selected delegation credential to the relying party.

11. A method comprising:

5 receiving a request from a delegate for access to a service;

obtaining delegation credentials for the delegate; determining which of the delegation credentials correspond to access requirements for the service; and

10 providing the delegation credentials that correspond to the access requirements.

12. The method of claim 11, further comprising:

receiving a digital credential from the delegate; and determining if the digital credential corresponds to access requirements for the service;

wherein, if the digital credential does not correspond to the access requirements for the service, the method performs the obtaining, determining and providing.

20

13. The method of claim 11, further comprising:
receiving, from the delegate, a selected one of the delegation credentials that correspond to the access requirements; and

using the selected one of the delegation credentials to access the service.

14. The method of claim 13, further comprising:

5 verifying validity of the selected one of the delegation credentials prior to using the selected one of the delegation credentials to access the service.

15. The method of claim 13, further comprising:

10 receiving a statement indicating that the selected one of the digital credentials is valid prior to using the selected one of the delegation credentials to access the service.

16. A method comprising:

15 receiving, from a delegate, a value corresponding to a confirmation code and an identifier, the confirmation code and the identifier corresponding to a delegator;

identifying the delegator using at least one of the identifier and the confirmation code; and

20 assigning, to the delegate, a delegation credential that corresponds to the delegator.

17. The method of claim 16, further comprising:
sending a message to the delegator indicating that the
delegation credential has been assigned.

5 *Claim 18* 18. The method of claim 16, further comprising:
storing the delegation credential in a database
maintained by a delegation service provider.

10 19. The method of claim 16, wherein identifying
comprises checking a hash of the confirmation code to identify
the delegator.

15 20. A method comprising:
receiving, from a delegate, a delegation request for a
role of the delegator;
receiving a value corresponding to a confirmation code
from the delegate;
receiving, from the delegator, a request for outstanding
delegation requests;
20 requesting approval from the delegator of an outstanding
delegation request from the delegate; and
receiving the confirmation code from the delegator in
response to requesting approval.

21. The method of claim 20, further comprising:
confirming the approval of the outstanding delegation
request using the confirmation code.

5 22. The method of claim 21, further comprising:
receiving a digital credential from the delegator; and
confirming that the received digital credential matches a
digital credential of the delegator.

10 23. An article comprising a machine-readable medium that
stores executable instructions that cause a machine to:
receive, from a delegator, a designation of a role and a
delegate to assume the role;
receive, from a credential service provider, an
indication that the designation is valid; and
issue a delegation credential in response to receiving
the indication.

20 24. The article of claim 23, wherein the delegation
credential comprises encoded delegation information.

25. The article of claim 23, wherein the delegation
credential allows the delegate to assume the role.

26. The article of claim 23, further comprising instructions that cause the machine to:

issue a confirmation to the delegator which indicates that the delegation credential was issued.

5

27. The article of claim 23, wherein the delegator can delegate multiple functions, the role comprising one of the multiple functions.

10 28. The article of claim 23, wherein the delegation credential is issued to and stored by at least one of the delegate and a credential service provider.

15 29. An article comprising a machine-readable medium that stores executable instructions that cause a machine to:

receive a request from a delegate for access to a service;

obtain delegation credentials for the delegate;

determine which of the delegation credentials correspond 20 to access requirements for the service; and

provide the delegation credentials that correspond to the access requirements.

30. The article of claim 29, further comprising
instructions that cause the machine to:

receive a digital credential from the delegate; and
determine if the digital credential corresponds to access
5 requirements for the service;

wherein, if the digital credential does not correspond to
the access requirements for the service, obtaining,
determining and providing are performed.

10 31. The article of claim 29, further comprising
instructions that cause the machine to:

receive, from the delegate, a selected one of the
delegation credentials that correspond to the access
requirements; and

15 use the selected one of the delegation credentials to
access the service.

32. The article of claim 31, further comprising
instructions that cause the machine to:

20 verify validity of the selected one of the delegation
credentials prior to using the selected one of the delegation
credentials to access the service.

33. The article of claim 31, further comprising instructions that cause the machine to:

receive a statement indicating that the selected one of the digital credentials is valid prior to using the selected 5 one of the delegation credentials to access the service.

34. An article comprising a machine-readable medium that stores executable instructions that cause a machine to:

receive, from a delegate, a value corresponding to a confirmation code and an identifier, the confirmation code and the identifier corresponding to a delegator;

identify the delegator using at least one of the identifier and the confirmation code; and

assign, to the delegate, a delegation credential that corresponds to the delegator.

35. The article of claim 34, further comprising instructions that cause the machine to:

send a message to the delegator indicating that the 20 delegation credential has been assigned.

36. The article of claim 34, further comprising instructions that cause the machine to:

store the delegation credential in a database maintained by a delegation service provider.

37. The article of claim 34, wherein identifying
5 comprises checking a hash of the confirmation code to identify the delegator.

38. An article comprising a machine-readable medium that stores executable instructions that cause a machine to:

10 receive, from a delegate, a delegation request for a role of the delegator;

receive a value corresponding to a confirmation code from the delegate;

15 receive, from the delegator, a request for outstanding delegation requests;

request approval from the delegator of an outstanding delegation request from the delegate; and

receive the confirmation code from the delegator in response to requesting approval.

20

39. The article of claim 38, further comprising instructions that cause the machine to:

confirm the approval of the outstanding delegation request using the confirmation code.

40. The article of claim 39, further comprising
instructions that cause the machine to:

receive a digital credential from the delegator; and
confirm that the received digital credential matches a
digital credential of the delegator.

65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99